

Title (en)

NEW INTERMEDIATE COMPOSITE MATERIALS HAVING INTERLOCKING RIBBONS

Title (de)

NEUE VERBUNDMATERIALIEN MIT INEINANDER GREIFENDEN BÄNDERN

Title (fr)

NOUVEAUX MATERIAUX INTERMEDIAIRES REALISES PAR ENTRECROISEMENT AVEC ENTRELACEMENT DE FILS VOILES

Publication

EP 2516138 B1 20140319 (FR)

Application

EP 10807607 A 20101217

Priority

- FR 0959428 A 20091222
- FR 2010052779 W 20101217

Abstract (en)

[origin: CA2780855A1] The present invention relates to an intermediate material comprising a set of bands intertwined by interlacing, said material being characterized in that at least some of the bands, and preferably all of the bands, which are so-called voile bands, consist of a series of reinforcing threads or filaments that extend in a parallel direction for the length of the band so as to form a one-way sheet that is combined, on each surface thereof, with a thermoplastic fiber nonwoven, said two nonwovens ensuring the cohesion of said voile band due to the thermoplastic character thereof. The invention also relates to a manufacturing method that implements such material for creating composite parts and moreover relates to the resulting composite parts.

IPC 8 full level

B29C 70/16 (2006.01); **B29C 70/22** (2006.01); **D03D 15/00** (2006.01)

CPC (source: EP US)

B29B 11/16 (2013.01 - EP US); **B29C 70/22** (2013.01 - EP US); **B29C 70/342** (2013.01 - EP US); **D03D 15/267** (2021.01 - EP US); **D03D 15/46** (2021.01 - EP US); **D10B 2101/12** (2013.01 - EP US); **D10B 2331/021** (2013.01 - EP US); **D10B 2505/02** (2013.01 - EP US); **Y10T 428/1369** (2015.01 - EP US); **Y10T 442/2008** (2015.04 - EP US); **Y10T 442/3041** (2015.04 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

FR 2954356 A1 20110624; **FR 2954356 B1 20120113**; BR 112012014358 A2 20160607; BR 112012014358 B1 20200114; CA 2780855 A1 20110721; CA 2780855 C 20170103; CN 102770260 A 20121107; CN 102770260 B 20140917; EP 2516138 A1 20121031; EP 2516138 B1 20140319; ES 2465993 T3 20140609; JP 2013515124 A 20130502; JP 5765788 B2 20150819; RU 2012131371 A 20140127; RU 2551514 C2 20150527; US 2012237707 A1 20120920; US 9914267 B2 20180313; WO 2011086266 A1 20110721

DOCDB simple family (application)

FR 0959428 A 20091222; BR 112012014358 A 20101217; CA 2780855 A 20101217; CN 201080064521 A 20101217; EP 10807607 A 20101217; ES 10807607 T 20101217; FR 2010052779 W 20101217; JP 2012545380 A 20101217; RU 2012131371 A 20101217; US 201013513914 A 20101217